

CLAIMS

What is claimed is:

1. An apparatus comprising:
 - 5 a) a rendering engine for rendering images onto a medium;
 - b) an input port for receiving an image data; and
 - c) a print preview projection mechanism for converting the received image data into corresponding displayable image data and for projecting the displayable image data for viewing by a
10 user.
2. The apparatus of claim 1 wherein the print preview projection mechanism provides the user with a preview of the image data prior to rendering of the image data; and wherein the print preview projection
15 mechanism includes a display format mechanism for converting the received image data into corresponding displayable image data.
3. The apparatus of claim 1 wherein the print preview projection mechanism includes a projection mechanism for projecting the displayable
20 image data onto a two-dimensional surface; and wherein the projected preview image is a two-dimensional image.
4. The apparatus of claim 1 wherein the print preview projection mechanism includes a projection mechanism for projecting the displayable
25 image data into a three-dimensional space; and wherein the projected preview image is one of a two-dimensional image and a three-dimensional image.

5. The apparatus of claim 1 wherein the print preview projection mechanism further includes

an image manipulation application for allowing a user to manipulate
5 the image data prior to rendering.

6. The apparatus of claim 5 wherein the image manipulation application supports one of user interface functions, editing operations, compositing operations, image processing operations, delete and add
10 operations, other image modification operations, and a combination thereof.

7. The apparatus of claim 1 wherein the input port includes one of a connection port, a media reader slot, and a receiver.

15 8. The apparatus of claim 1 wherein the apparatus is coupled to an image source through a communication link; and wherein the image source provides the image data;

wherein the image source includes one of a storage media, an image capture device, a digital camera, a personal communication device, a
20 cellular telephone, a personal digital assistant, and other device external to the image rendering apparatus; and

wherein the communication link includes one of a wireless link, a wired link, a USB cable, and a channel specified by a predetermined frequency.

9. The apparatus of claim 1 wherein the image data includes one of text data, a digital picture data, graphic data, drawing data, images, and a combination thereof.

5 10. The apparatus of claim 1 wherein the apparatus is one of a printer, a facsimile machine, and an all-in-one office machine.

11. The apparatus of claim 1 further comprising:
a plurality of switches for use by a user to control print preview
10 functions and image editing functions; wherein each switch, when activated by the user, generates a signal representing user input; and wherein the signal is provided to the print preview projection mechanism.

12. The apparatus of claim 5 wherein the image manipulation
15 application includes
a multiple image manipulation module for receiving image data and user input and based thereon for generating a composite image file; a source write unit for writing data to an image source.

20 13. An apparatus comprising:
a) a rendering engine for rendering images;
b) an input port for receiving an image data;
c) a display format mechanism for converting the received image data into corresponding displayable image data;
25 d) a view finder for use by a user to view images; and
e) a projection mechanism, coupled to the viewfinder, for projecting the displayable image data into the viewfinder.

14. The apparatus of claim 13 wherein the viewfinder is one of integrated with the image rendering apparatus and detachable from the image rendering apparatus.

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15. The apparatus of claim 13 wherein the viewfinder is coupled to the projection mechanism through one of a wired link and a wireless link.

16. The apparatus of claim 13 wherein the viewfinder is implemented as one of a pair of virtual reality glasses, a two-dimensional viewer, and a three-dimensional viewer; and wherein the projected image is one of projected onto a two-dimensional surface and projected into a three-dimensional space for viewing.

17. The apparatus of claim 13 wherein the image rendering apparatus is one of a printer, a facsimile machine, and an all-in-one office machine.

18. The apparatus of claim 13 further comprising:
an image manipulation application for allowing a user to manipulate the image data prior to rendering; wherein the image manipulation application supports one of user interface functions, editing operations, compositing operations, image processing operations, delete and add operations, other image modification operations, and a combination thereof.